## Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

- 1 9. (canceled)
- (currently amended) An object identification system comprising:

at least one detection unit for positioning at a check point to detect gamma, X-ray and neutron radiations from an object at said check point and emitting a corresponding detection signal thereto, said detection unit including a microprocessor controller and an information transfer device; and

a preprocessing unit for receiving and analyzing said detection signal to identify the object at said check point, said preprocessing unit including a display unit, an information input device, a processor having a spectrum spectrum analysis unit and a connecting unit for communicating with an expert system for receiving instructions therefrom for further processing of the object at said check point.

- (currently amended) An The object identification system of as set forth in claim
   wherein said the connecting unit includes a channel for two-way transfer of audio and video information.
- 12. (previously presented) An object identification system as set forth in claim 10 wherein said preprocessing unit is a mobile device selected from the group consisting of a smart phone and a notebook.
- (currently amended) An The object identification system of as set forth in claim
   wherein said the preprocessing unit includes [[a]] an optical scanner.

- 14. (currently amended) An The object identification system of as set forth in claim 10, further comprising a plurality of said the detection units disposed at a plurality of check points, each said the detection unit being connected to said the preprocessing unit and including an identification marker.
- 15. (currently amended) An The object identification system of as set forth in claim 10, further comprising a common housing containing said the detection unit and said the preprocessing unit.
- 16. (currently amended) An The object identification system of as set forth in claim 10, wherein said the preprocessing unit is selectively connected to a remote expert system for receiving instructions therefrom for further processing of the object at said the check point.
- 17. (currently amended) An The object identification system of as set forth in claim 10, wherein said the preprocessing unit has a receiver selectively connected to a global positioning system to determine the geographic location of the object at said the check point.
- 18. (currently amended) An object identification system comprising at least one detection unit for positioning at a cheek point to detect gamma, X-ray and neutron radiations from an object at said the check point and emitting a corresponding detection signal thereto, said the detection unit including a microprocessor controller and an information transfer device;
- a preprocessing unit for receiving and analyzing said the detection signal to identify the object at said eheek point, said the preprocessing unit including a display unit, an information input device, a processor having a spectrum spectrum analysis unit and a connecting unit for communicating with an expert system for receiving instructions therefrom for further processing of the object at said eheek point; and

an expert system remote from said the detection unit for receiving instructions from said the preprocessing unit for further processing of the object at said-cheek-point and having a communication channel connected to one of a national emergency warning system and a departmental emergency warning system for activation in response to an emergency situation.

- 19. (currently amended) An The object identification system of as set forth in claim 18, wherein said the preprocessing unit has a receiver selectively connected to a global positioning system to determine the geographic location of the object at said the check point.
- 20. (new) A portable hand-held system for identification of a radiation source, the system comprising:
- a portable detection unit that detects ionizing radiation from the radiation source and provides a corresponding detection signal based on the detected radiation;
  - a spectrum analysis unit for analyzing a radiation spectrum detected by the detection unit;
  - a display unit for displaying results of the spectrum analysis; and
- a connecting unit for communicating with an expert system and for receiving instructions for further processing of the radiation source.
- 21. (new) The system of claim 20, wherein the system is housed in a common housing with a mobile telephone that includes a microprocessor for the analyzing of the radiation spectra.
- (new) The system of claim 20, wherein the ionizing radiation includes gamma radiation.
- (new) The system of claim 20, wherein the ionizing radiation includes X-ray radiation.

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 (new) The system of claim 20, wherein the ionizing radiation includes neutron radiation.

 (new) The system of claim 20, wherein the ionizing radiation includes neutron, gamma and X-ray radiation.

26. (new) The system of claim 20, wherein the system includes a global positioning system receiver, and wherein the connecting unit communicates current position of the system to the expert system.

(new) The system of claim 26, wherein the system includes a mobile telephone
that includes a microprocessor for the analyzing of the radiation spectrum.

28. (new) The system of claim 20, wherein the system includes a global positioning system receiver, and wherein the connecting unit communicates current position of the system to the expert system.

29. (new) The system of claim 20, wherein the system is connected using BlueTooth to a mobile device that includes a microprocessor for the analyzing of the radiation spectra, the mobile device being any of a laptop, a personal communicator and a mobile telephone.

30. (new) A portable hand-held system for identification of a radiation source, the system comprising:

a portable detection unit that detects gamma radiation, X-ray radiation and neutron radiation emitted by the radiation source being inspected and provides a corresponding detection signal based on the radiation;

a radioisotope analysis unit for analyzing radiation detected by the detection unit;

a display unit for displaying results of the analysis to a user, including radiation spectrum;

a GPS receiver providing a current position information; and

a connecting unit for communicating the results of the analysis and the current location to a remote computer.

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